

IN THE CLAIMS:

All pending claims are set forth below. Please AMEND claims 1 and 2 in accordance with the following:

1. (CURRENTLY AMENDED) A variable wavelength dispersion compensator, comprising:

an angular dispersion unit angular dispersing a plurality of wavelengths of input beams; stage units; and

a surface-shape variable mirror unit returning the angular dispersed beams to the angular dispersion unit and comprising a transformable surface shape where the stage units transform the mirror unit to a predetermined shape by expanding at selective positions of a back surface of the mirror unit, wherein the wavelengths of the input beams are dispersed by reflecting the beams from the angular dispersion unit on the surface-shape variable mirror unit, by inputting the reflected beams to the angular dispersion unit, and by outputting the angular dispersed beams from the angular dispersion unit.

2. (CURRENTLY AMENDED) The variable wavelength dispersion compensator according to claim 1, wherein said surface-shape variable mirror unit further comprises:

a mirror face unit reflecting beams; ~~and~~

~~a plurality of stage units setting the mirror face unit to a shape, which contacts a back surface of the mirror unit.~~

3. (PREVIOUSLY AMENDED) The variable wavelength dispersion compensator according to claim 2, wherein said mirror face unit is a thin plate comprising a variable elasticity.

4. (PREVIOUSLY AMENDED) The variable wavelength dispersion compensator according to claim 1, further comprising:

a plurality of surface-shape variable mirror units; and

a branching unit branching the angular-dispersed beams into a plurality of beam groups with different wavelengths, wherein the plurality of said surface-shape variable mirror units are provided and each surface shape is set where wavelength dispersion is compensated for each branched beam group.

5. (PREVIOUSLY AMENDED) The variable wavelength dispersion compensator according to claim ~~4~~, wherein the plurality of said surface-shape variable mirror units are incorporated into the surface-shape variable mirror unit, which comprises the transformable surface transformed in a two-dimensional direction so that each branched beam group is received on a part of the surface and a prescribed wavelength dispersion is given to the branched beam group.

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cont. ~~2~~ ~~1~~ ~~2~~ ~~1~~ 6. (ORIGINAL) The variable wavelength dispersion compensator according to claim ~~4~~, wherein said branching unit is a diffraction grid.

~~2~~ ~~1~~ ~~2~~ ~~1~~ 7. (ORIGINAL) The variable wavelength dispersion compensator according to claim ~~4~~, wherein said branching unit is a VIPA.
